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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/681,680	10/08/2003	Mohammed E. H. Sennoun	8540G-000036	7701

27572 7590 02/09/2005

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EXAMINER

BASICHAS, ALFRED

ART UNIT PAPER NUMBER

3749

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Supplemental
Notice of Allowability**

Application No.

10/681,680

Examiner

Alfred Basichas

Applicant(s)

SENNOUN ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to application filed 10/8/04.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 08 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 10/8/03
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

**ALFRED BASICHAS
PRIMARY EXAMINER**

REASONS FOR ALLOWANCE

1. The following is an examiner's statement of reasons for allowance:

Applicants claim, among other things, combustor comprising a combustor liner enclosing a cool portion and a hot portion of the combustor, a pre-mix, pre-evaporation chamber positioned within the combustor liner providing a cool portion having an inlet opening from the cool portion of the combustor, a hot portion having an outlet opening into the hot portion of the combustor, and a flange extending from an outer surface of the pre-mix, pre-evaporation chamber toward the combustor liner and separating the hot portion of the combustor from the cool portion of the combustor, a fuel injector positioned adjacent the inlet opening for injecting liquid fuel into the pre-mix, pre-evaporation chamber through the inlet opening, and an igniter positioned in the hot portion of the combustion chamber adjacent the outlet opening, wherein the liquid fuel injected into the pre-mix, pre-evaporation chamber from the injector mixes with air entering the pre-mix, pre-evaporation chamber through the inlet opening and evaporates substantially completely to form a combustion mixture of air and fuel vapor before exiting the pre-mix, pre-evaporation chamber through the outlet opening; and further wherein the combustion mixture is ignited and is substantially consumed in a non-

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sooting flame within a combustion zone adjacent the outlet opening to produce a hot exhaust stream.

Henriques, Mowill, Beebe, and Lee disclose combustors representative of the state of the combustor art. Nevertheless, the prior art of record, taken alone or in combination therewith, does not disclose nor make obvious the combination as claimed by applicants.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alfred Basichas whose telephone number is 703 306 3476. The examiner can normally be reached on Monday through Friday during regular business hours.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ira Lazarus can be reached on 703 308 1935. The fax phone numbers for the organization where this application or proceeding is assigned are 703 872 9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 308 0861.

February 3, 2005



Alfred Basichas
Primary Examiner
703 306 3476